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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,321

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Per Mansson

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BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER

JUNG, UNSU

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/517,321	Applicant(s) MANSSON ET AL.	
	Examiner Unsu Jung	Art Unit 1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-14 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' amendment to cancel claims 1-9 and 15-34 in the reply filed on December 12, 2005 has been acknowledged and entered.

2. Claims 10-14 are pending.

Election/Restrictions

3. Applicant's election without traverse of Group II (claims 10-14) in the reply filed on December 12, 2005 is acknowledged.

Drawings

4. The drawings are objected to because Fig.'s 12-15 are missing axis labels and the axis scales of Fig.'s 12-15 are not legible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be

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necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference element 119 in Fig. 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The use of the trademark PEEKTM (p14, line 31) and CHEMINERT[®] (p15, line4) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

7. Claims 12 and 13 are objected to because of the following informalities: a comma is needed following the word "for" in line 2 and the phrase "flow-through" should be inserted following the word "individual" in line 4. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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10. In claim 10, the term “each receptor” in line 5 is vague and indefinite. It is unclear whether or not the term “each receptor” is referring to “cell connecting receptors” in line 4.

11. In claim 10, the term “piezoelectric crystal microbalance” in line 6 is vague and indefinite. It is unclear whether or not the term “piezoelectric crystal microbalance” is referring to “piezoelectric crystal microbalances” in line 3.

12. In claim 10, the term “receptor connecting portion” in line 8 is vague and indefinite. It is unclear whether or not the term “receptor connecting portion” is referring to “receptor connecting portion” in line 5.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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14. Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshimine et al. (U.S. PG Pub. No. US 2004/0051595 A1, Filed Dec. 7, 2001).

Yoshimine et al. anticipates instant claims by teaching a multiple piezoelectric crystal microbalance device comprising (p4, paragraph [0050]-p8, paragraph [0084]):

- a connecting station, 100 and 101, for receiving and individually operating an array of piezoelectric crystal microbalances (reference element 45 in Fig. 11);
- the piezoelectric crystal microbalances comprise:
 - a connecting panel, 112 and 113, (reference elements 14 and 18 in Fig.'s 7 and 8, respectively) having an array of cell connecting receptors, 118 (reference element 16 in Fig. 8), each receptor comprising a receptor connector portion, 120, (Fig. 6) for mating operative engagement with a cell connector portion, 24, (Fig. 6) of each piezoelectric crystal microbalance flow-through cell, 10, (Fig. 6), wherein each connector portion comprises a pair of electric connecting ports, 126 and 128, (reference elements 4 and 4' in Fig. 1) for communication with a power and measurement means, 130, (reference element 38 in Fig. 11) for oscillating a piezoelectric crystal, 50, (reference element 2 in Fig.'s 1 and 2) carrying two electrodes, 56 and 62, (reference elements 2' and 2" in Fig.'s 1 and 2) in a cell compartment, 34, (Fig. 6) of one operatively engaged flow-through cell, 10, (reference element T in Fig. 6) and for measuring oscillating characteristics of the piezoelectric crystal and

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- a pair of fluid connecting ports, 122 and 124, (reference elements 9 and 10 in Fig. 6) for communication with flowing means for flowing a solution (75) and a test solution aliquot (83) to and through the cell compartment (p8, paragraphs [0083] and [0084]).

With respect to claim 11, Yoshimine et al. teaches the multiple piezoelectric crystal microbalance device of claim 10, wherein the individually operated piezoelectric crystal microbalances are electrostatically (p4, paragraph [0029 and pp7-8, paragraph [0080]).

15. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Kawakami et al. (U.S. Patent No. 5,728,583, Mar. 17, 1998) in light of Luscher, U.S. Patent No. 3,585,527, Oct. 27, 1969).

Kawakami et al. anticipates instant claims by teaching a multiple piezoelectric crystal microbalance device comprising (Fig.'s 1-9):

- a connecting station, 100 and 101, for receiving and individually operating an array of piezoelectric crystal microbalances (reference elements 63 and 64 in Fig. 9);
- the piezoelectric crystal microbalances comprise:
 - a connecting panel, 112 and 113, (reference elements 10 in Fig. 6) having an array of cell connecting receptors, 118 (reference elements 11a-11c in Fig. 6), each receptor comprising a receptor connector portion, 120, (Fig. 6) for mating operative engagement with a cell connector portion, 24, (Fig.

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- 6) of each piezoelectric crystal microbalance flow-through cell, 10, (Fig. 4), wherein each connector portion comprises a pair of electric connecting ports, 126 and 128, (reference elements 72 and 73 in Fig. 6) for communication with a power and measurement means, 130, (column 5, lines 52-62) for oscillating a piezoelectric crystal, 50, (reference elements 50a-50c in Fig.'s 2 and 3) carrying electrodes (reference elements 51a-51c in Fig. 7) in a cell compartment, 34, (square pits, column 5, lines 36-41) of one operatively engaged flow-through cell, 10, and for measuring oscillating characteristics of the piezoelectric crystal and
- o a pair of fluid connecting ports, 122 and 124, (reference elements 61a-61c and 62a-62c in Fig. 1) for communication with flowing means for flowing a solution (75) (column 3, lines 17-30).

Although Kawakami et al. fails to specifically disclose two electrodes associated with the piezoelectric crystal (quartz), one of ordinary skill in the art would realize that the crystal/quartz oscillator of Kawakami et al. would inherently include two electrodes as Luscher teaches a well known crystal/quartz oscillator circuit, which includes a quartz crystal having two electrodes (column 2, lines 30-40). With respect to the limitation of providing flowing means for a test solution aliquot (83) to and through the cell compartment, one of ordinary skill in the art would recognize that the fluid connecting ports of Kawakami et al. would inherently be able to provide a test solution aliquot through the cell compartment via the fluid connecting ports.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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19. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al. (U.S. Patent No. 5,728,583, Mar. 17, 1998) in view of Takeuchi et al. (U.S. Patent No. 6,326,563, Filed Sept. 22, 1999).

Kawakami et al. teaches the multiple piezoelectric crystal microbalance device as discussed above. However, Kawakami et al. fails to teach a multiple piezoelectric crystal microbalance device, wherein the individually operated piezoelectric crystal microbalances are electrostatically and electromagnetically shielded from each other. The current specification discloses that electrostatic and electromagnetic shielding can be provided by enclosing an individually operated piezoelectric crystal microbalance with a metal (p14, lines 6-10).

Takeuchi et al. teaches a method of shielding by coating a piezoelectric element with a conductive material such as a metal (column 17, lines 29-35). A shield layer consisting of a conductive material reduces external electromagnetic noise and improves measurement sensitivity of the piezoelectric element (column 6, lines 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the multiple piezoelectric crystal microbalance device of Kawakami et al. with a shield layer consisting of a conductive material such as metal as taught by Takeuchi et al. in order to reduce external electromagnetic noise and improve measurement sensitivity of the piezoelectric element.

With respect to claims 12 and 13, Kawakami et al. teaches a multiple piezoelectric crystal microbalance, wherein the connecting station, 100, comprises connection means for serial or parallel interconnection for the flowing of the solution, 75,

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and test solution aliquot, 83, to and through the cell compartment, 34, of the individual cells, 10 (column 8, lines 32-40).

20. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimine et al. (U.S. PG Pub. No. US 2004/0051595 A1, Filed Dec. 7, 2001) in view of Kawakami et al. (U.S. Patent No. 5,728,583, Mar. 17, 1998).

Yoshimine et al. teaches the multiple piezoelectric crystal microbalance device as discussed above. However, Yoshimine et al. fails to teach a multiple piezoelectric crystal microbalance device, wherein the connecting station (100) comprises connection means for serial or parallel interconnection for the flowing of the solution (75) and test solution aliquot (83) to and through the cell compartment (34) of the individual cells (10).

Kawakami et al. teaches a flow cell apparatus having a plate-shaped quartz oscillator with a protein layer as a measuring element (Abstract). Kawakami et al. teaches a flow connection in both parallel (column 8, lines 32-34) and serial (Fig. 9) manner. Different samples can be supplied using a parallel flow connection (Example 1), while serial flow connection would require only a single pump to deliver one type of blood sample to all the flow cells in an array (Fig. 9 and column 8, lines 38-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the multiple piezoelectric crystal microbalance device of Yoshimine et al. with a serial and a parallel flow connection of the flow cells as taught by Kawakami et al. in order to supply either single sample or a plurality of samples to the piezoelectric crystal balance device.

21. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimine et al. (U.S. PG Pub. No. US 2004/0051595 A1, Filed Dec. 7, 2001) in view of Ricchio et al. (U.S. Patent No. 5,130,095, July 14, 1992).

Yoshimine et al. teaches the multiple piezoelectric crystal microbalance device as discussed above. However, Yoshimine et al. fails to teach a multiple piezoelectric crystal microbalance device, further comprising grounding means (108) for electrical grounding of the flow solution (75) and the test solution aliquot (83) to the cell compartment (34) of each of the flow-through cell (10).

Ricchio et al. teaches a flow cell having a solution grounding means on the inlet line for the sample adjacent to the entrance to the flow cell of fluid thereby minimizing electronic noise (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the multiple piezoelectric crystal microbalance device of Yoshimine et al. with a method of grounding the inlet line of the flow cell device as taught by Ricchio et al. in order to minimize electronic noise.

22. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al. (U.S. Patent No. 5,728,583, Mar. 17, 1998) in view of Ricchio et al. (U.S. Patent No. 5,130,095, July 14, 1992).

Kawakami et al. teaches the multiple piezoelectric crystal microbalance device as discussed above. However, Kawakami et al. fails to teach a multiple piezoelectric

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crystal microbalance device, further comprising grounding means (108) for electrical grounding of the flow solution (75) and the test solution aliquot (83) to the cell compartment (34) of each of the flow-through cell (10).

Ricchio et al. teaches a flow cell having a solution grounding means on the inlet line for the sample adjacent to the entrance to the flow cell of fluid thereby minimizing electronic noise (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the multiple piezoelectric crystal microbalance device of Kawakami et al. with a method of grounding the inlet line of the flow cell device as taught by Ricchio et al. in order to minimize electronic noise.

Double Patenting

23. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

24. Claims 10, 12, and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 22 of copending Application No. 10/542,616 in view of Kawakami et al. (U.S. Patent No. 5,728,583, Mar. 17, 1998).

The copending Application teaches a piezoelectric crystal microbalance comprising:

- a connecting panel (112, 113) having a cell connecting receptor (118), each receptor comprising a receptor connector portion (120) for mating operative engagement with a cell connector portion (24) of each piezoelectric crystal microbalance flow-through cell (10), wherein each connector portion comprises a pair of electric connecting ports (126, 128) for communication with a power and measurement means (130) for oscillating a piezoelectric crystal (50) carrying two electrodes (56, 62) in a cell compartment (34) of one operatively engaged flow-through cell (10) and for measuring oscillating characteristics of the piezoelectric crystal and
- a pair of fluid connecting ports (122, 124) for communication with flowing means for flowing a solution (75) and a test solution aliquot (83) to and through the cell compartment.

However, the copending Application fails to teach a sensor system comprising an array of piezoelectric crystal microbalances.

Kawakami et al. teaches a flow cell apparatus having an array of plate-shaped quartz oscillator (piezoelectric crystal microbalance) with a protein layer as a measuring element to detect adhesion of blood component on the protein layer (Abstract).

Kawakami et al. teaches a flow connection in both parallel (column 8, lines 32-34) and serial (Fig. 9) manner. Different samples can be supplied using a parallel flow connection (Example 1), while serial flow connection would require only a single pump to deliver one type of blood sample to all the flow cells in an array (Fig. 9 and column 8, lines 38-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the piezoelectric crystal microbalance device of the copending Application in a array format with a serial and a parallel flow connection of the piezoelectric crystal microbalances as taught by Kawakami et al. in order to supply either single sample or a plurality of samples to the piezoelectric crystal balance device for use in an assay to detect blood components.

This is a provisional obviousness-type double patenting rejection.

25. Claims 10, 12, and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-47 of copending Application No. 10/539,065 in view of Kawakami et al. (U.S. Patent No. 5,728,583, Mar. 17, 1998).

The copending Application teaches a piezoelectric crystal microbalance comprising:

- a connecting panel (112, 113) having a cell connecting receptor (118), each receptor comprising a receptor connector portion (120) for mating operative engagement with a cell connector portion (24) of each piezoelectric crystal microbalance flow-through cell (10), wherein each connector portion comprises a pair of electric connecting ports (126, 128) for communication with a power and measurement means (130) for oscillating a piezoelectric crystal (50) carrying two electrodes (56, 62) in a cell compartment (34) of one operatively engaged flow-through cell (10) and for measuring oscillating characteristics of the piezoelectric crystal and
- a pair of fluid connecting ports (122, 124) for communication with flowing means for flowing a solution (75) and a test solution aliquot (83) to and through the cell compartment.

However, the copending Application fails to teach a sensor system comprising an array of piezoelectric crystal microbalances.

Kawakami et al. teaches a flow cell apparatus having an array of plate-shaped quartz oscillator (piezoelectric crystal microbalance) with a protein layer as a measuring element to detect adhesion of blood component on the protein layer (Abstract).

Kawakami et al. teaches a flow connection in both parallel (column 8, lines 32-34) and serial (Fig. 9) manner. Different samples can be supplied using a parallel flow

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connection (Example 1), while serial flow connection would require only a single pump to deliver one type of blood sample to all the flow cells in an array (Fig. 9 and column 8, lines 38-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the piezoelectric crystal microbalance device of the copending Application in a array format with a serial and a parallel flow connection of the piezoelectric crystal microbalances as taught by Kawakami et al. in order to supply either single sample or a plurality of samples to the piezoelectric crystal balance device for use in an assay to detect blood components.

This is a provisional obviousness-type double patenting rejection.

Conclusion

26. No claim is allowed.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Unsu Jung whose telephone number is 571-272-8506. The examiner can normally be reached on M-F: 9-5.

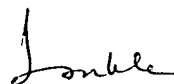
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Unsu Jung, Ph.D.
Patent Examiner
Art Unit 1641



LONG V. LE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600
02/03/06